

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A computer-implemented method of implementing a subject specific search engine to compile and access subject-specific information, associated with a predefined particular subject, from a computer network, the method comprising the steps of:

traversing links between websites comprising one or more objects on the computer network, by said search engine, the objects respectively comprising at least one of: one or more web pages comprising the websites; and one or more components comprising any one or more of said web pages, the objects comprising at least one of: words, terms and expressions;

filtering, by said search engine, subject specific contents of each site said object visited to determine a relevancey of said subject specific content thereof to said predefined particular subject; and, wherein said filtering comprises:

(a) decomposing said objects into one or more said components;

(b) generating a lexicon comprising subject specific terminology deemed relevant to the predefined particular subject, the subject specific terminology comprising respective words, terms and expressions;

(c) comparing said decomposed components of said objects to said subject specific terminology of the lexicon to determine whether each said object is a subject specific relevant object, wherein said comparing comprises:

(i) assigning a weight to each of said words, terms and expressions comprising the subject specific terminology of the lexicon;

(ii) if a said word, term or expression comprising the object matches a corresponding said word, term or expression comprising the subject specific

terminology of the lexicon, adding a corresponding weight thereof to a cumulative total; and

(iii) determining any of said objects to be a subject specific relevant object if the cumulative total surpasses a predefined threshold value;

(d) based upon said comparing, determining all objects deemed to be subject specific relevant as objects to be saved;

~~filtering the contents of a said site at least a second time for relevancy to said particular subject;~~

~~presenting for an indexing operation, at said search engine, information on each object determined to be site deemed subject specific relevant to said particular subject based upon by said filtering.~~

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Currently amended) The method according to Claim 61, wherein ~~the said step (d)~~

further comprises: of passing the contents of the site through a lexicon-based filter further comprises the steps of:

~~saving component parts deemed to be relevant and passing them to the presenting step; and~~

~~discarding component parts deemed not to be relevant~~ all objects determined not to be subject specific relevant based upon said comparing.

9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Canceled)
20. (Canceled)
21. (Canceled)
22. (Canceled)
23. (Canceled)
24. (Currently amended) The method according to Claim 41, wherein said filtering the contents of a site at least said second time for relevancy occurs prior to said step of presenting.
25. (Canceled)

26. (Currently amended) The method according to Claim 1[[4]], further comprising the step of:

replacing the lexicon with a lexicon corresponding to a different subject in order to present for said indexing operation create a different set of subject specific relevant objects subject specific database.

27. (Currently amended) The method according to Claim 1, wherein the plurality of subject specific relevant objects are indexed and stored in a searchable database further comprising ~~the step of compiling a database of searchable information relevant to said predefined particular subject~~.

28. (Currently amended) The method according to Claim 65 27, further comprising the steps of:

permitting a user to enter a query comprising user-preferred words, terms or expressions, wherein the steps of claim 1 are performed in response thereto; and
searching the database for information according to the query.

29. (Currently amended) The method according to Claim 66 28, further comprising the step of: displaying information found in said step of searching ~~in a hierarchical format~~.

30. (Currently amended) The method according to Claim 28, further comprising the step of:

determining a site ranking for each website site associated with information found in said searching step, ~~where the determining is according to how interesting at least one of authors and users of the computer network have found the site associated with the information.~~

31. (Currently amended) The method according to Claim 30, further comprising the step of:

displaying the results of the user query using the site ranking of ~~each item of the~~ information found in the searching step ~~search~~ to determine an order in which the results are displayed.

32. (Currently amended) The method according to Claim 31, wherein the step of displaying the results of the user query comprises the step of: displaying the results of the user query in a hierarchical format according to the site ranking.

33. (Currently amended) The method according to Claim 27, further comprising wherein the step of compiling a database comprises the step of: for each said subject specific relevant object site to be stored in the database, assigning a word score to each word appearing on that objectsite.

34. (Currently amended) The method according to Claim 33, wherein the step of assigning word scores comprises the steps of:

determining all websites sites found in the database that contain links to the website site;

for each word on the websites site, assigning a word score for that word based at least in part on its presence on each website site containing a link to the website site.

35. (Currently amended) The method according to Claim 34, wherein the step of assigning a word score for that word further comprises the step of increasing the word score for each website site containing a link to the website site when the word appears in close proximity to the link.

36. (Currently amended) The method according to Claim 33, wherein the step of assigning word scores comprises the steps of:

determining all websites sites found in the database that contain links to the website site; and

assigning a word score to each word on the website site based at least in part on how many websites sites linking to the website site also contain the particular word.

37. (Currently amended) The method according to Claim 36, wherein the step of assigning a word score for that word further comprises the step of increasing the word score for each website site containing a link to the website site according to the proximity of the word to the link.

38. (Currently amended) The method according to Claim 33, further comprising the steps of:

entering a user query;
using the user query to search the database; and
computing a site ranking for each website site associated with information found in said searching step, the site ranking being computed based on said word scores.

39. (Currently amended) The method according to Claim 38, wherein the step of computing a site ranking comprises the steps of:

for each website site associated with information found in said searching step, summing the word scores for that website site corresponding to words in the user query.

40. (Previously Presented) A computer-readable storage medium containing software code that, when executed by a processor, causes the processor to execute the method as claimed in Claim 1.

41. (Previously Presented) A system to implement a subject specific search engine for compiling and accessing information relevant to a particular subject from a computer network, the system comprising:

a processor; and
the computer-readable storage medium as claimed in Claim 40.

42. (Currently amended) The method according to Claim 1, wherein the filtering further comprises
further comprisesing the step of: monitoring a depth for each said link, the depth being a reflection of relevance to said predefined particular subject.

43. (Currently amended) The method according to Claim 42, wherein said the step of monitoring comprises the steps of:

for a given said object site being visited resulting from said link, setting a said depth depths of any links leading from said object that site to other objects sites to a depth of a link traversed to reach the given object site;

wherein where said the given object site is determined to be relevant to said predefined particular subject in the filtering step, setting the depths of the links leading from said object that site to zero; and

wherein where said the given object site is determined not to be relevant to said predefined particular subject in the filtering step, incrementing the depths of the links leading from said object that site.

44. (Currently amended) The method according to Claim 43, wherein said the step of monitoring further comprises the steps of:

comparing the incremented depths to a predetermined maximum depth value;
wherein where when the incremented depths exceed the predetermined maximum depth value, discarding the links leading from said the given object site;

wherein where when the incremented depths do not exceed the predetermined maximum depth value, traversing one of the links leading from said the given objectsite.

45. (Canceled)

46. (Currently amended) A subject specific search engine system to implement a operable search engine to compile and permit accessing of subject-specific information, associated with a predefined particular subject, from a computer network, the subject specific search engine system comprising:

a host computer ~~to execute executing~~ software stored upon a computer-readable storage medium, the software comprising:

a subject specific smart crawler of said search engine ~~to traverse traversing~~ links between websites comprising one or more objects on the computer network, and the objects respectively comprising at least one of: one or more web pages comprising the websites; and one or components comprising any one or more of said web pages, the objects comprising at least one of: words, terms and expressions; said subject specific smart crawler performing filtering, a first filter of said search engine, to filter out sites, based on site contents, whose contents are irrelevant to said particular subject, and to permit only sites relevant to said particular subject to pass of subject specific content of each said object visited to determine a relevance of said subject specific content thereof to said predefined particular subject, wherein said filtering comprises:

- (a) decomposing said objects into one or more said components;
- (b) generating a lexicon comprising subject specific terminology deemed relevant to the predefined particular subject, the subject specific terminology comprising respective words, terms and expressions;
- (c) comparing said decomposed components of said objects to said subject specific terminology of the lexicon to determine whether each said object is a subject specific relevant object, wherein said comparing comprises:
 - (i) assigning a weight to each of said words, terms and expressions comprising the subject specific terminology of the lexicon;
 - (ii) if a said word, term or expression comprising the object matches a corresponding said word, term or expression comprising the subject specific terminology of the lexicon, adding a corresponding weight thereof to a cumulative total; and
 - (iii) determining any of said objects to be a subject specific relevant object if the cumulative total surpasses a predefined threshold value;
- (d) based upon said comparing, determining all objects deemed to be subject specific relevant as objects to be saved;

an indexer of said search engine indexing to index the relevant sites the plurality of said objects determined to be subject specific relevant to said particular subject based upon said filtering; and
a memory, connected to the host computer, for storing the plurality of said objects determined to be subject specific relevant indexed subject specific information generated by said indexer;
wherein the software further comprises at least a second filter, prior to said indexer.

47. (Currently amended) The system according to Claim 46, wherein said filtering is performed by a first lexicon based filter~~first filter comprises a lexicon-based filter~~.

48. (Currently amended) The system according to Claim 47, wherein the lexicon is stored on system~~further comprises an interchangeable computer-readable storage medium on which is stored a lexicon for the lexicon-based filter, the lexicon containing terminology specific to said particular subject.~~

49. (Canceled)

50. (Currently amended) The system according to Claim 46, wherein the system further comprises a human-computer interface, and ~~wherein at least one of said first filter or said at least a second filter comprises:~~

device for presenting said subject specific relevant objects relevant site information received from the smart crawler to a human editor via the human-computer interface; and

device for receiving input from the human editor, entered via the human-computer interface, regarding as to whether or not to index and store said subject specific relevant objects the site in the memory.

51. (Currently amended) The system according to Claim 47 46, further comprising wherein at least one of said first filter and said at least a second filter- performing one or more operations of the first filter comprises a lexicon-based filter.

52. (Canceled)

53. (Canceled)

54. (Withdrawn) A method of ranking the relevance of information stored in a database, the information comprising web pages, the method comprising the steps of:

computing and storing a word ranking for each word, except for stop words, found on each web page; and

in response to a user query, computing a site ranking for each web page found in response to the user query based on the word rankings.

55. (Withdrawn) The method according to Claim 54, wherein the step of computing a word ranking is performed according to how interesting at least one of authors and users of a computer network in which each web page is resident have found the web page.

56. (Withdrawn) The method according to Claim 54, wherein the step of computing a word ranking comprises the step of:

for each word, except stop words, on each web page, determining all web pages found in the database that contain links to the web page on which the word appears; and
assigning a word score for that word based at least in part on its presence on each web page containing a link to the web page on which that word appears, the word score constituting the word ranking for that word.

57. (Withdrawn) The method according to Claim 56, wherein the step of assigning a word score for that word further comprises the step of increasing the word score for each web page containing a link to the web page on which that word appears if the word appears in close proximity to the link.

58. (Withdrawn) The method according to Claim 54, wherein the step of computing a site ranking comprises the steps of:

for each web page found in response to the user query, summing the word rankings for that web page corresponding to words in the user query.

59. (Withdrawn) A computer-readable medium containing software implementing the method of Claim 54.

60. (Canceled)

61. (Canceled)

62. (New) A computer-implemented method of implementing a subject specific search engine to compile and access subject specific information, associated with a predefined particular subject, from a computer network, the method comprising the steps of:

traversing links between websites comprising one or more objects on the computer network, by said search engine, the objects respectively comprising at least one of: one or more web pages comprising the websites; and one or components comprising any one or more of said web pages, the objects comprising at least one of: words, terms and expressions;

filtering, by said search engine, subject specific content of each said object visited to determine relevance of said subject specific content thereof to said predefined particular subject, wherein said filtering comprises:

(a) presenting one or more of said components of each of said objects to a human editor via a human computer interface;

(b) permitting the human editor to deem a said object to be a subject specific relevant object if the human editor determines any of said components comprising said object to be within said predefined particular subject;

(c) permitting the human editor to deem a said object to not be a subject specific relevant object if the human editor determines any of said components comprising said object to not be within said predefined particular subject; and

(d) based upon said (b) and (c), determining all objects deemed to be subject specific relevant as objects to be saved;

presenting for an indexing operation at said search engine, each object determined to be subject specific relevant to said predefined particular subject based upon said filtering.

63. (New) A computer-implemented method of implementing a subject specific search engine to compile and access subject specific information, associated with a predefined particular subject, from a computer network, the method comprising the steps of:

traversing links between websites comprising one or more objects on the computer network, by said search engine, the objects respectively comprising at least one of: one or more web pages comprising the websites; and one or components comprising any one or more of said web pages, the objects comprising at least one of: words, terms and expressions;

filtering, by said search engine, subject specific content of each said object visited to determine relevance of said subject specific content thereof to said predefined particular subject, wherein said filtering comprises

(a) decomposing said objects into one or more said components;

(b) generating a lexicon comprising subject specific terminology deemed relevant to the predefined particular subject, the subject specific terminology comprising respective words, terms and expressions;

(c) comparing said decomposed components of said objects to said subject specific terminology of the lexicon to determine whether each said object is a subject specific relevant object, wherein a said object is deemed to be a subject specific relevant object if at least one component thereof matches a corresponding subject specific terminology of the lexicon;

(d) based upon said comparing, determining all objects deemed to be subject specific relevant as objects to be saved;

presenting for an indexing operation at said search engine, each object determined to be subject specific relevant to said predefined particular subject based upon said filtering.

64. (New) The method according to Claim 1, further comprising indexing the totality of objects determined to be subject specific relevant to yield a subcategory of objects.

65. (New) The method according to Claim 64, wherein the objects are websites, the computer network comprises the Internet, and the subcategory of objects comprises a portion of the Internet (Internet').

66. (New) The method according to Claim 28, further comprising performing a searching operation upon the Internet'.